EC 9

EC 10

C1 R1 C2 R5 C3 D1 D2 C4 R4 R2 R3 IC1 R6 R7 C5 R8 Q1 C7 R9 R10 Q2 C6 R11 R12 C8 R13 R14 A1 A2

R29 R30 C12 R31 R32 R33 C14 Q6 R36 Q7 R37 R34 R35 C13 C15 R38 R39 R40 Q8 P1-9 EC7 C18 R52 R53 C21 R63 C22

A2 R17 P1-11 R15 R16 Q3 Q4 R22 A1 C9 R18 R21 R23 R19 R20 C10 EC8 R24 EC13 C11 R27 R28 Q5 R25 EC11 EC12 R26

R41 R42 R43 C16 D3 R44 R45 R46 R47 R48 R49 R50 C17 Q9 Q10 Q11 R51 R54 R55 R57 R56 R58 R59 Q12 Q13 C19 C20 R60 P1-7 R61 R62 Q14 B1 R64

$\uparrow = +5 v$

$\downarrow = -5 v$

$\perp = ground\ (\emptyset v)$

Last #'s		P	P1-20
R	R114	Q	Q23
C	C46	IC	IC3
D	D3	EC	EC22

EC 3
EC 5

EC 7
EC 22
EC 11
EC 22
EC 13
EC 22

3x-
1K pot

optional
3x- .1µfd

6x- BNC

EC 9
EC 10

EC 21
EC 20

EC
19
18
14
17
15
17
16
17

EC 8
EC 22

2x- Mini-Jax

EC 11
EC 22

Edge Connector

+5V Supply   +   EC 3
             -(⏚)
                              EC1

-5V Supply   +(⏚)
             -        EC5
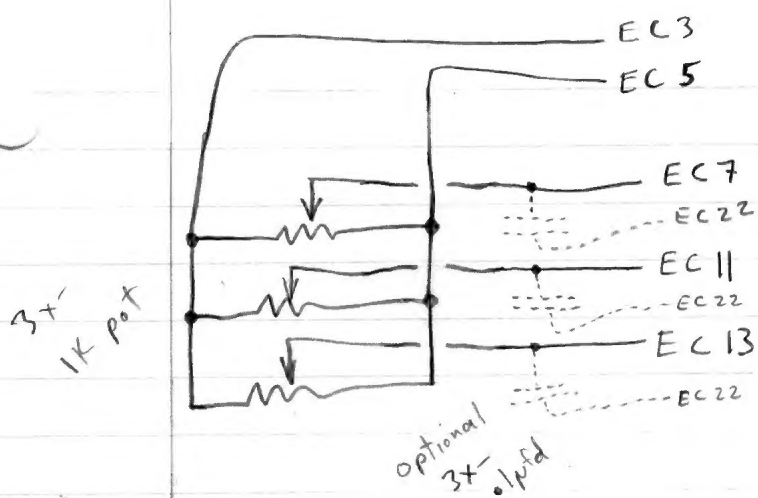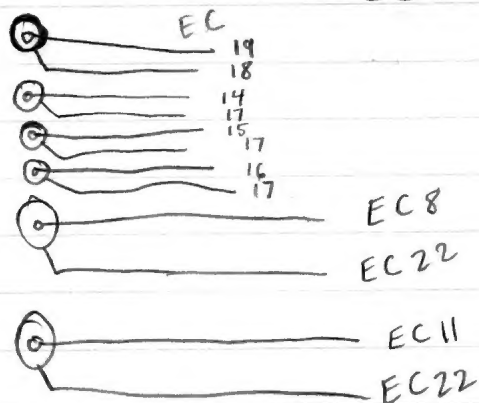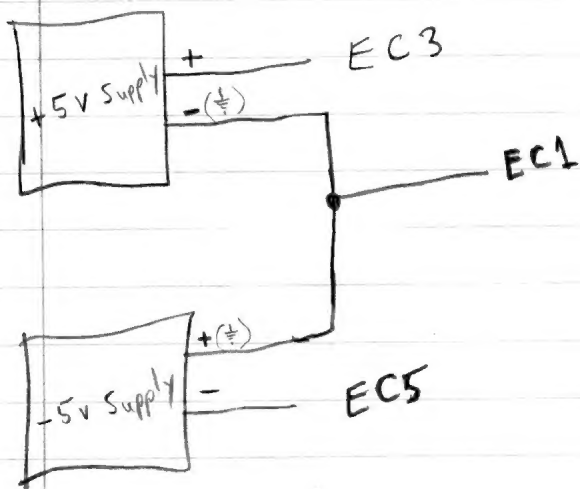
6x -
1K Trimpot (10 turn)

optional
6x - .1µfd

Engineering
Box

P_1

P_2

P_3

P_4

P_5

P_6

P_7

P_8

P_9

P_{10}

P_{11}

P_{12}

P_{13}

P_{14}

P_{15}

P_{16}

2x - .1µfd
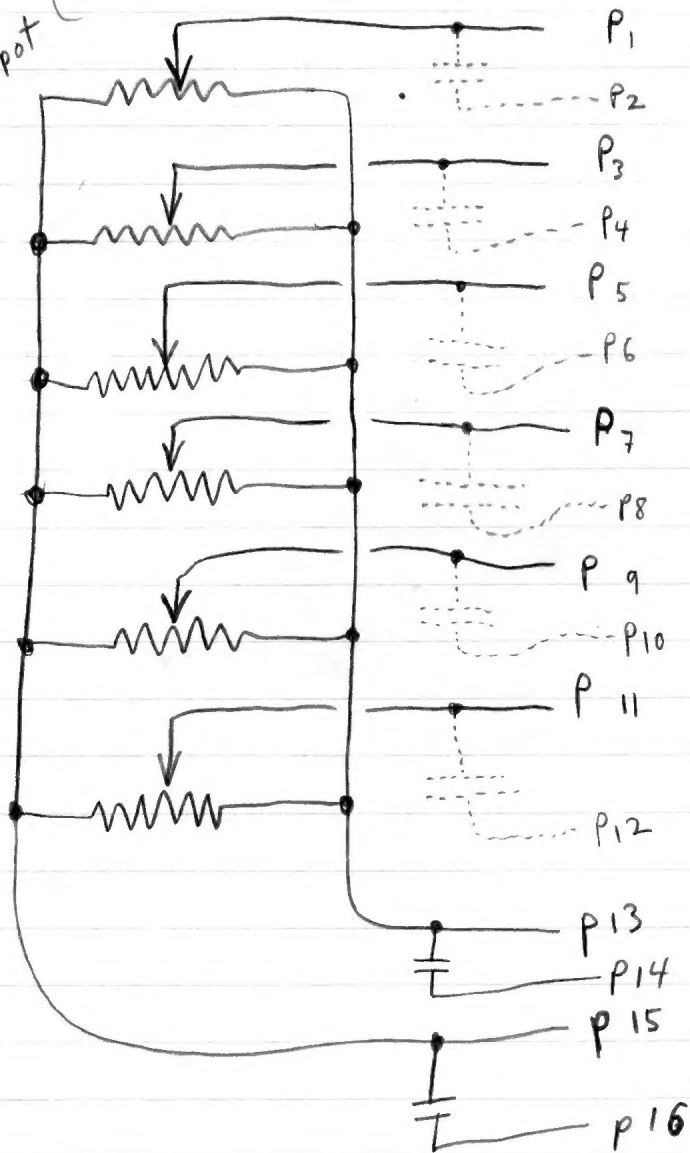
O.A.1   parts Count

	without Input Amp	"Normal"
10 Ω	20	25
75	1	1
100	10	11
220	2	2
390	1	1
510	14	15
560	1	1
750	1	1
1K	4	6
1.2K	1	1
1.5K	14	14
2K	6	6
2.2K	8	8
4.3K	1	1
5.1K	1	2
7.5K	1	1
10K	2	2
15K	1	1
20K	6	8
51K	1	1
100K	4	5

	without Input Amp	"Normal"
10p	1	1
.01µ	7	7
.1	15	17
22	6	6
100	9	15
1N4148	1	1
1N270	0	2
LH0002CH	1	2
CD4051N	1	1
2N3904	17	18
2N3906	4	5
16 pin socket	1	1
20 pin "berg" connector (male & female)	1	1

O.A. 1   parts list

⊛ R		⊛ R		R		R	
1	20K	21	100	41	510	61	510
2	20K option 2	22	510	42	1.5K	62	510
3	1K	23	2.2K	43	1.5K	63	10
4	2.0K	24	2.2K	44	100	64	1K
5	100	25	100K	45	10	65	1.5K
6	10	26	100K	46	10	66	1.5K
7	10	27	100K	47	510	67	1.5K
8	100K	28	100	48	1.5K	68	100
9	5.1K	29	10	49	1.5K	69	1.5K
10	510	30	220	50	100	70	100
11	10	31	220	51	390	71	10
12	10	32	510	52	2.2K	72	1.5K
13	1K	33	510	53	10	73	1.5K
14	10	34	10	54	2.2K	74	510
15	2.2K	35	10	55	1150Ω	75	100K
16	2.2K	36	1.5K	56	561Ω	76	51.2KΩ
17	510	37	1.5K	57	10	77	7.5K
18	100	38	15K	58	530Ω	78	100
19	10	39	10K	59	2.2K	79	10
20	10	40	100	60	2.2K	80	10

⊛ = for input Amp section

R		R		D		Q			Q	
R81	1K	R101	2K	✳ D1	1N270 (met a)	✳ Q1	2N3906		Q16	2N3904
82	100	102	20K	✳ 2	1N270	✳ 2	2N3904		17	"
83	~~1.5K~~	103	2K	3	1N4148	3	"		18	"
84	~~1.5K~~	104	20K			4	"		19	"
85	5.1K	105	2K	✳ IC1	LH0002	5	"		20	"
86	4.3K	106	20K	2	CD4051	6	"		21	"
87	510	107	2K	3	LH0002	7	"		22	"
88	10	108	20K			8	2N3906		23	"
89	1K	109	2K			9	"			
90	10K	110	510			10	"			
91	750	111	510			11	2N3904			
92	510	112	10			12	2N3906			
93	10	113	10			13	2N3904			
94	1K	114	75			14	"			
95	10					15	"			
96	10									
97	10									
98	20K									
99	2K									
100	20K									

✳ = for input Amp Section

C_1		C_{21}		C_{41}		EC_1	
⊛ C_1	100	C_{21}	100	C_{41}	100	EC_1	⏚
⊛ 2	100	C 22	.1	42	100	2	———
⊛ 3	100.	23	.01	43	.1	3	+5
⊛ 4	100	24	.01	44	.1	4	———
⊛ 5	.1	25	10p	45	100	5	−5
⊛ 6	100	26	100	46	100	6	———
⊛ 7	100	27	.1			7	ped. pot
⊛ 8	.1	28	.1	P_1	Burst level	8	ped. mini
9	.01	29	.01	2	⏚	9	Video in +
10	.01	30	.1	3	Burst Centering	10	Video in −
11	.1	31	.1	4	⏚	11	gain pot
12	100	32	.1	5	Sync level	12	gain mini
13	.1	33	.1	6	⏚	13	input offset
14	.1	34	100	7	output centering	14	B.F
15	.1	35	22	8	⏚	15	Sync
16	.01	36	22.	9	Black clip	16	Blanking
17	.01	37	22	10	⏚	17	Sync, B.F & BL. ⏚
18	.1	38	22	11	input offset	18	S.C. −
19	100	39	22	12	⏚	19	S.C. +
20	.1	40	22	13	+5	20	output ⏚
				14	⏚	21	output
				15	−5	22	⏚
				16	⏚		
				17	⏚		
				18	⏚		
				19	⏚		
				20	⏚		

⊛ = for input amp section
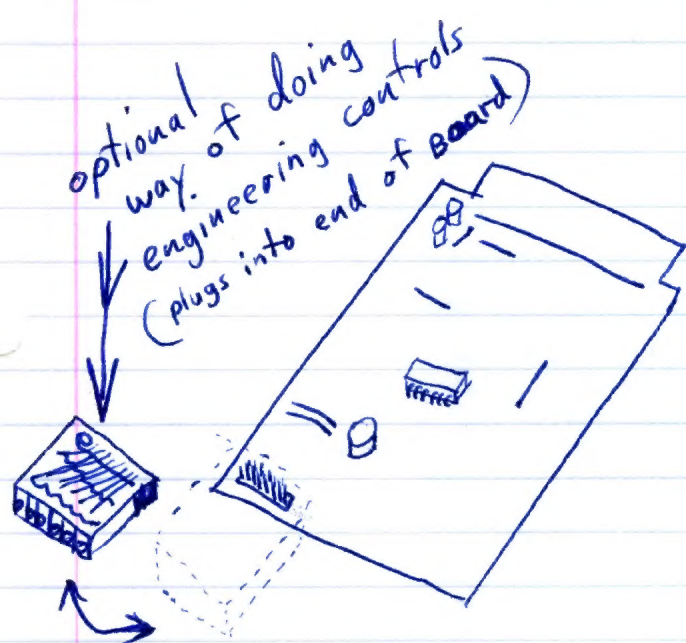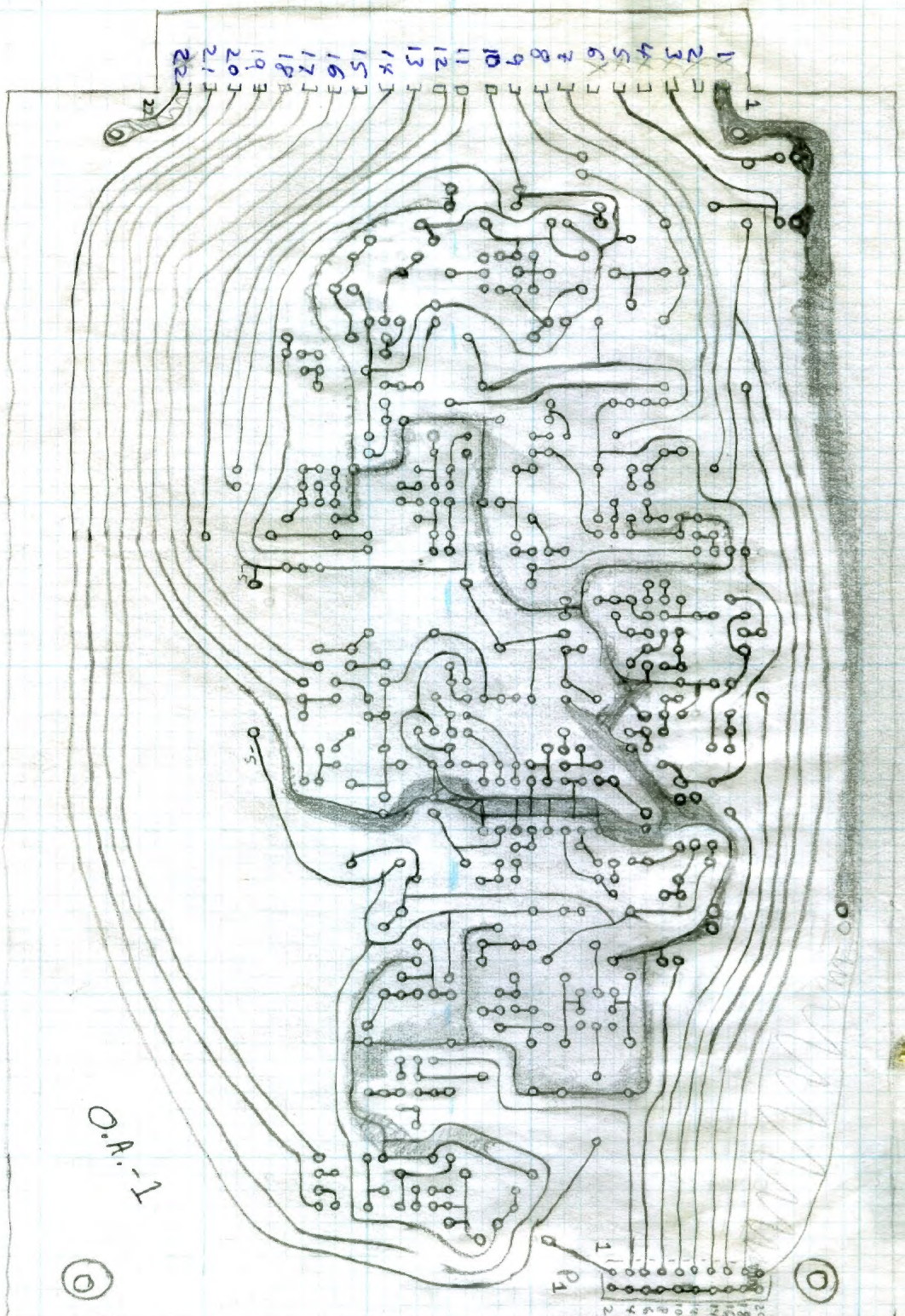
O.A.-1   option   guide

"with input Amp"

~~[scribbled out]~~ $R_1, R_3 \sim R_{114}, C_1 \sim C_{46}, D_1 \sim D_3, IC_1 \sim IC_3, Q_1 \sim Q_{23}$

"without input Amp" $R_{15} \sim R_{114}, C_9 \sim C_{46}, D_1, D_2, IC_2 \sim IC_3, Q_3 \sim Q_{23}$

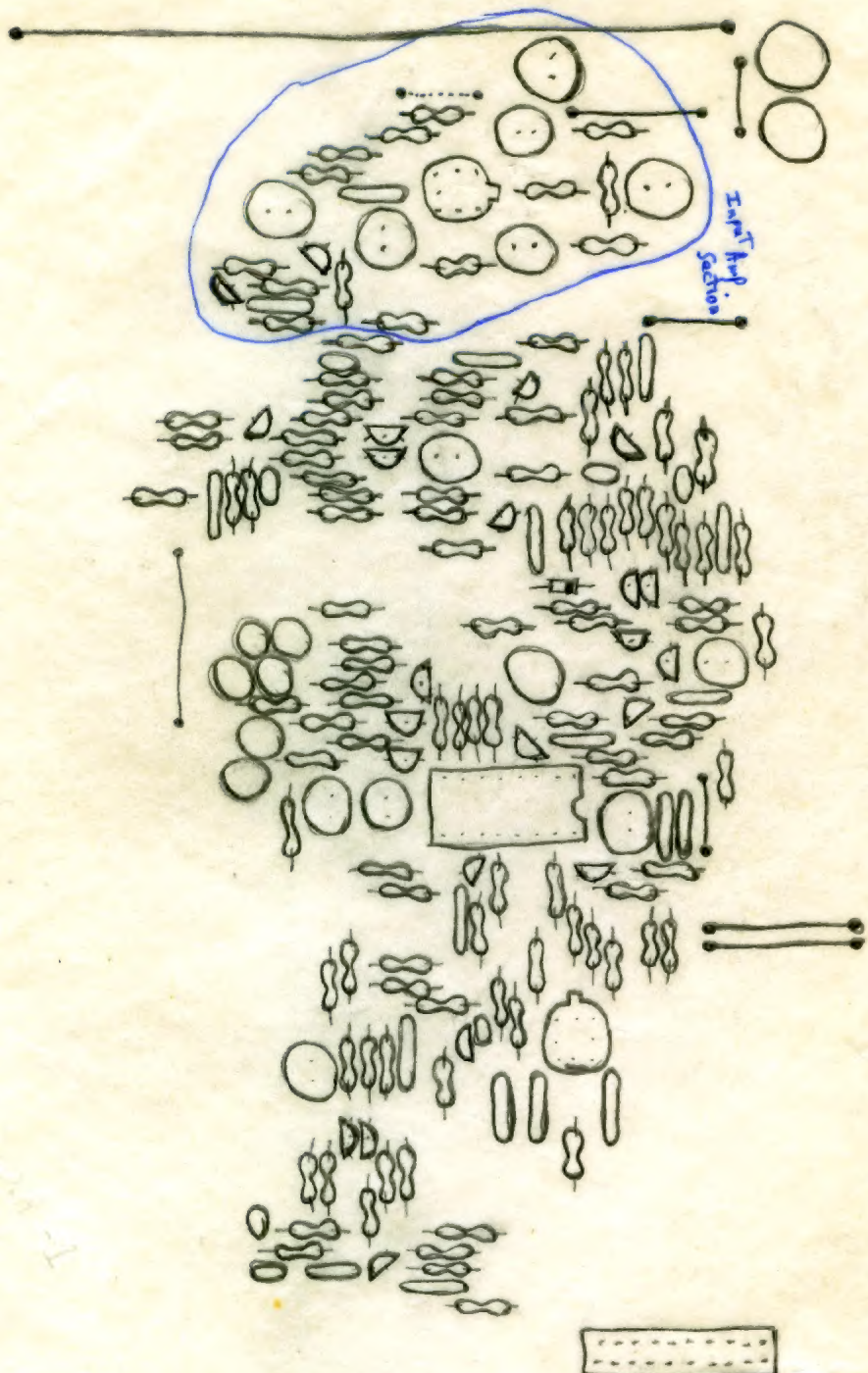"for Video input Amp   "   Move R_1 to R_2
with ~~[scribbled out]~~ input above $+5$ DC   turn C_1, C_2 around (polarity reversal)

optional of doing
way. of doing
engineering controls
(plugs into end of Board)

O.A.-1

O.A1 9/5/81

Input Amp
Section

OA1 4/15/81

EC1

−5
+5
C45 C46

Input Amp.
section

C1
R2 R4 C2
R3 R7
C4 D2 R5
R14 IC1 D1 C3
R8 C5 C6 R1
C7 Q1 R6
R13 R10 R9
Q2 R12 C8 R15 R11

R34
C14 R33 R39 C17 C15
R36 Q6 R40 R38 Q8
R30 C12 R43 C16 Q9
R35 R31 Q7 R41
R32 C13 R37

R25 Q5 C9 R16 Q3 Q4
R26 R18 R19
R24 C11 R17 Q12 R23
C10 R28 R22
R27

R98
C36 R99
C35 C38 C32 R100
C37 R104 R103
Q19 R107
R106 C34 Q23 C42
R97

R57 C19 R44 Q14
IC2 C39
Q21 R105 R101 R102

R90 R91
R94 R111 R110 R112
Q20 R92 R93
R88 C33 R93 C33
R89 Q17 R86 R71 R72 R73 R74

O.A.-1
O.A1 9/15/91
P1